Department of Planning and Zoning

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TO:

Development Review Board

FROM:

Scott Gustin

DATE:

September 20, 2011

RE:

12-0253CA/CU; 259 Appletree Point Road

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: WRL

Ward: 4

Owner/Applicant: Mark Plante

Request: Increase height of concrete seawall and reinforce with rip rap

Applicable Regulations:

Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines)

Background Information:

The applicant is seeking approval to increase the height of an existing concrete seawall by 2' and to install new rip rap in front of the seawall to repair shoreline damage associated with flooding this past spring and to prevent future damage. Associated fill and grading work is also proposed to repair the lawn damage. Two new stairways to the beach will be constructed among the rip rap. As the proposed work is located partially below the 102' elevation, it is subject to review under the flood hazard area regulations in addition to dimensional and design review standards. As required, the project is subject to review and approval by the State National Floodplain Insurance Program Coordinator at VT DEC. A copy of the application was provided to the Coordinator on August 29, 2011 but no response has yet been received. The Coordinator has 30 days to respond. Any comments received within the 30 day period will be incorporated into this approval.

Recommendation: Consent approval as per, and subject to, the following findings and conditions:

I. Findings

Article 4: Maps & Districts Sec. 4.4.5, Residential Districts:

(a) Purpose

(2) Waterfront Residential Low Density (WRL)

The subject property is located in the WRL zone. This zone is intended primarily for low density residential development in the form of single detached dwellings and duplexes with consideration given to design review. The single family home use will remain unchanged. (Affirmative finding)

(b) Dimensional Standards & Density

The proposed rip rap and stairs will increase lot coverage. No lot coverage figure has been provided and one is needed; however, the parcel appears to remain below the 35% coverage maximum. The rip rap is located within the 75' lakeshore setback; however, it may encroach into this setback per Sec. 5.2.5, Setbacks, (b) Exceptions to Yard Setback Requirements. The modified seawall and associated rip rap are well under the maximum allowable height of 35'. (Affirmative finding as conditioned)

(c) Permitted & Conditional Uses

The rip rap and seawall are accessory to the permitted single family home. (Affirmative finding)

(d) District Specific Regulations

1. Setbacks

See Sec. 4.4.5 (b) above for setback encroachment.

2. Height

Not applicable.

3. Lot Coverage

Not applicable.

4. Accessory Residential Structures and Uses

Not applicable.

5. Residential Density

Not applicable.

6. Uses

Not applicable.

7. Residential Development Bonuses

Not applicable.

Sec. 4.5.4, Natural Resource Protection Overlay District:

(a) District Specific Regulations: Special Flood Hazard Area

(7) Special Review Criteria

A. The danger to life and property...

The rip rap and modified seawall are located within the lakeshore flood hazard area. Lakeshore flood dynamics are unlike those of river flood dynamics. The water does not flow at perceptible speeds and is not subject to constriction. Modification of the seawall and placement of the rip rap within the lakeshore flood zone will have no impact on flood heights or velocities. (Affirmative finding)

B. The danger that material may be swept onto other lands...

The seawall is already anchored into the ground. The new rip rap will consist of large quarried stones and will be anchored into the ground along its base. There is little danger that the structure will be swept away by flood waters. (Affirmative finding)

C. The proposed water supply and sanitation systems...

Not applicable.

D. The susceptibility of the proposed facility and its contents to flood damage...

The modified seawall and new rip rap are protective measures against flood damage to the property. The potential for flooding damage to the modified wall and rip rap is minimal. (Affirmative finding)

E. The importance of the services provided...

The proposed work is of little importance to the Burlington community; however, it will provide substantial protection to the private property that it will be located on. (Affirmative finding)

F. The availability of alternative locations...

The point of the proposed work is to protect the property from flood damage. Its placement within the flood zone is key to this function. It's location within the floodplain is acceptable. (Affirmative finding)

G. The compatibility of the proposed use with existing development...

Rip rap and seawalls are commonplace along Burlington's lakeshore. (Affirmative finding)

H. The relationship of the proposed use to the Municipal Development Plan...

The Municipal Development Plan does not address lakeshore reinforcements. It does speak to the development pattern of single family homes and duplexes in the RL and WRL zones. The subject property contains a single family home. Insofar as homes along the lakeshore commonly have seawalls or rip rap, the proposal can be found in compliance with the MDP. (Affirmative finding)

I. The safety of access to the property...

The proposed work will have no effect on the safety of access to the property during times of flood. (Affirmative finding)

J. The expected heights, velocity, duration, rate of rise...

The maximum regulatory flood elevation along the lakeshore is 102' above sea level. The proposed construction will have no impact on flood heights, velocity, duration, rate of rise, or sediment transport. (Affirmative finding)

K. Conformance with all other applicable requirements...

See Articles 4, 5, and 6 of these findings.

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.5 (b) above.

Sec. 5.2.4, Buildable Area Calculation

Not applicable.

Sec. 5.2.5, Setbacks

See Sec. 4.4.5 (b) above.

Sec. 5.2.6, Building Height Limits

See Sec. 4.4.5 (b) above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.4.5 (b) above.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to result in creating a nuisance under this criterion. (Affirmative finding)

Sec. 5.5.3, Stormwater and Erosion Control

As more than 400 sf of earth disturbance is proposed, a "small project erosion control" plan is required. Such a plan has been submitted for review by the Stormwater Administrator; however, approval has not yet been granted. Stormwater Administrator approval and any associated conditions will be incorporated into this zoning permit approval. (Affirmative finding as conditioned)

Article 6: Development Review Standards Part 1, Land Division Design Standards Not applicable.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The subject property is located along the Lake Champlain shoreline. The shoreline is an identified significant natural area. Much of the property is affected by the Natural Resource Protection Overlay District, specifically the riparian and littoral conservation zone, which stretches inland 250' from the 100' lakeshore elevation. As required, an erosion control plan has been provided for review by the Stormwater Administrator. Approval is pending. A single tree has been cut due to flooding damage. The Conservation Board reviewed and approved the project subject to Stormwater Administrator approval at their September 12, 2011 meeting. (Affirmative finding as conditioned)

(b) Topographical alterations

The property slopes towards the lake and will continue to do so. Some fill and grading is proposed and will repair the damaged yard up to the seawall. The proposed grading changes are moderate and acceptable. (Affirmative finding)

- *(c) Protection of important public views* Not applicable.
- (d) Protection of important cultural resources Not applicable.
- (e) Supporting the use of alternative energy Not applicable.

- (f) Brownfield sites Not applicable.
- (g) Provide for nature's events See Sec. 5.5.3.
- (h) Building location and orientation Not applicable.
- (i) Vehicular access
 Not applicable.
- (j) Pedestrian access Not applicable.
- (k) Accessibility for the handicapped Not applicable.
- (l) Parking and circulation Not applicable.

(m) Landscaping and fences

No new landscaping is proposed beyond the restoration of lawn between the house and the seawall. Vegetative screening of concrete seawalls has been required in the past. As the proposed rip rap will line the front of the seawall and will consist of large stone blocks similar in appearance to the naturally occurring ledge along parts of the Burlington shoreline, no screening is required. Vegetation will establish itself naturally over time amongst the stone. (Affirmative finding)

- (n) Public plazas and open space Not applicable.
- (o) Outdoor lighting Not applicable.
- (p) Integrate infrastructure into the design Not applicable.

Part 3, Architectural Design Standards Sec. 6.3.2, Review Standards Not applicable.

II. Conditions of Approval

- 1. **Prior to release of the zoning permit**, revised plans depicting proposed lot coverage shall be submitted, subject to staff review and approval.
- 2. **Prior to release of the zoning permit,** written approval of the small project erosion control plan shall be obtained from the Stormwater Administrator.
- 3. This approval incorporates timely comments and stipulations issued by the State National Floodplain Insurance Program Coordinator at VT DEC as related to this project.

- 4. The Applicant/Property Owner is responsible for obtaining all necessary Zoning Permits and Building Permits through the Department of Public Works as well as other permit(s) as may be required, and shall meet all energy efficiency codes as required.
- 5. Standard permit conditions 1-18.

259 Appletree Point Road Seawall Repair and Buttress August 18, 2011

The proposed work will all be completed under 104 feet elevation.

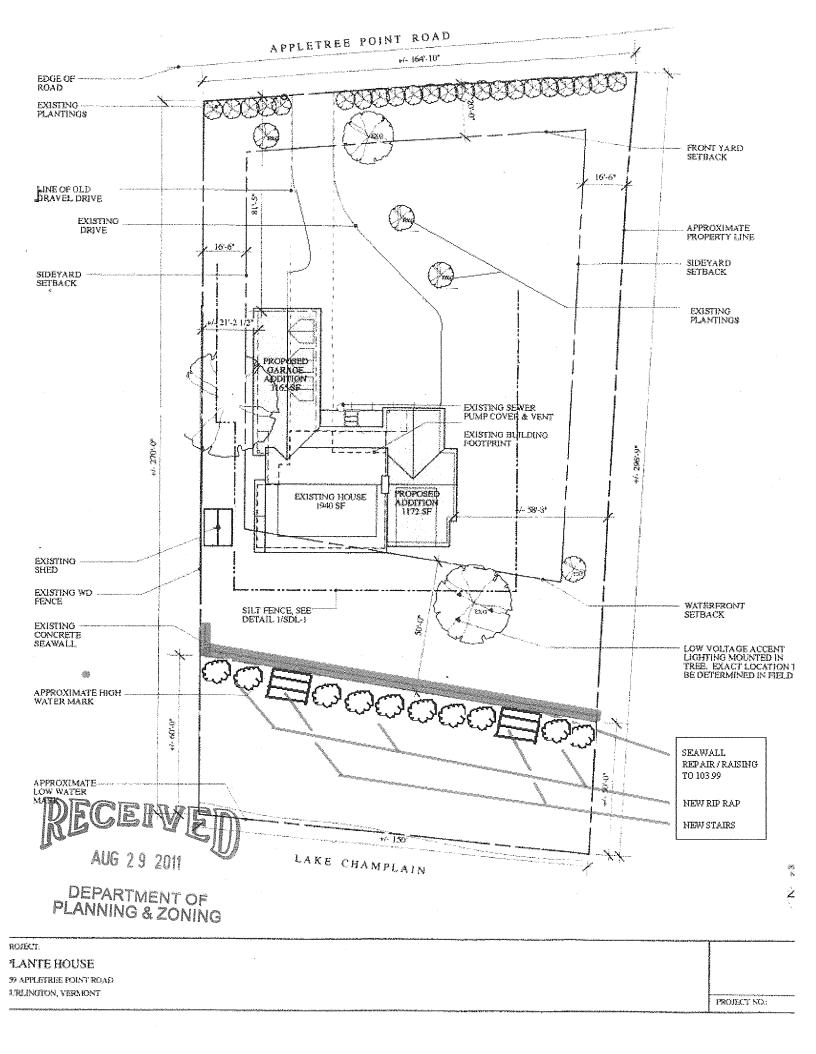
The proposed work is being done to protect the property given the extensive damage sustained as a result of the Lake Champlain flood this past spring. Given the existing seawall height at 102 feet elevation, it was breached by the lake level. Land and potential home damage was further compounded by debris from the lake and neighbors with walls higher and wind / wave action.

The work will entail:

- 1 elevation of the existing wall to 104 feet elevation
- 2 installation of natural rip-rap along its length respecting the lot line with the neighbor to the west this necessary given the ongoing undermining of the existing seawall
- 3 replacement of lost soils and lawn
- 4 repair of stone patio that was damaged

The included drawing – although rudimentary – displays the nature of the project.





(dimensional stone at property line) new rip-rap neighbor's existing wall new concrete stairs - 4 feet wide SEAWALL REPAIR - BUTTRESS 259 APPLETREE POINT ROAD existing wall (raises wall to 104 foot elevation from 102) new concrete cap DEPARTMENT OF PLANNING & ZONING AUG 2 5 2011